5

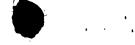
10

15

20

25





Attorney's Docket No. K&A 99-0733

## ABSTRACT OF THE DISCLOSURE

A method of applying polyacrylamide (PAM) for stabilizing soil particles of a land area from movement about the land area. The slope of the surface of the soil is measured, and a tentative application rate is determined based upon the slope of the land area. The stability of the soil of the land area is determined by placing a sample of the soil in a tray and pouring a liquid over the sample and evaluating the erosion potential of the soil by measuring any movement of the soil in the liquid. The liquid may be water or a mixture of water and PAM. The application rate may be increased above the tentative application rate if the soil sample showed a relatively higher vulnerability to erosion. An application rate is calculated for applying a mixture of PAM and water to the land area. The mixture is misted onto the surface of the land area in one or more mixture applications. An application of the mixture is continued until the top surface of the soil of the land area becomes saturated. Further mixture applications occur after any puddles of the mixture on the surface of the soil have been absorbed into the soil, but the surface of the soil is not permitted to dry. A spray of the mixture is directed onto the surface of the soil of the land area from at least four directions, and at a substantially perpendicular angle downward onto the surface of the soil of the land area. The extent of penetration of the mixture below the top surface of the soil of the land area is tested, and the mixture application is continued until a desired penetration of the PAM below the top surface of the soil is achieved.